

U.S.S.N. 10/713,472  
Filed: November 14, 2003  
AMENDMENT

### IN THE CLAIMS

#### Claims 22-42 (CANCELLED)

43. (currently amended) An isolated, A mammalian adult neuroendocrine stem undifferentiated cell population isolated by digestion of dissociated neuroendocrine tissue with a trypsin like enzyme.

44. (currently amended) A The undifferentiated stem cell population of claim 43, wherein the undifferentiated cell population is isolated from adrenal gland or pancreas tissue.

#### Claims 45-53 (CANCELLED)

54. (currently amended; renumbered) The undifferentiated cell population of claim 43 isolated by digestion of the tissue with trypsin, washing the cells with buffer and isolation of the cells by centrifugation at ~~1200 rpm~~ for five minutes sufficient to separate the undifferentiated intact cells from the buffer.

55. (new) The undifferentiated cell population of claim 43 isolated from the hypothalamus, pituitary, parathyroid, or thyroid.

56. (new) The undifferentiated cell population of claim 43 isolated from along the intestinal tract or the aorta.

57. (new) The undifferentiated cell population of claim 43 wherein the tissue is digested under conditions equivalent to 0.05% trypsin at 37°C for five minutes

58. (new) The undifferentiated cell population of claim 43 further comprising a hydrogel support structure.

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59. (new) The undifferentiated cell population of claim 58 further comprising a structure selected from the group consisting of a coral, hydroxyapatite, metallic, inorganic, ceramic, or polymeric fibers, mesh, struts, or sponge.

60. (new) The undifferentiated cell population of claim 43 further comprising a polymeric support structure.

61. (new) The undifferentiated cell population of claim 43 further comprising a support structure and factors selected from the group consisting of growth factors, nutrients, and drugs.